

Patent Claims

1. Method for pouring castings, for example motor vehicle wheels, from aluminum, magnesium or similar light metals in low-pressure casting machines which consist essentially of a crucible for keeping the melt hot, a casting mold arranged above the crucible, and a riser which emanates from the casting mold, passes through the top of the crucible and projects into the melt, the metal used up by the production of the casting being made up by the introduction of an extra charge of metal into the casting machine, **characterized in that**, a metal ingot (pig) with a mass corresponding essentially to the cast weight is introduced into the gas space above the molten metal level of the casting machine before each casting operation and, after the drawing or injection of the casting, is introduced into the pool of molten metal in the casting machine.
2. Method according to claim 1, characterized in that, during the pouring and solidification phase the mold is vibrated preferably at between 15,000 and 25,000 Hz.
3. Low-pressure casting machine for implementing the method according to claim 1, characterized in that, the charging opening of the crucible is designed as a horizontal or slightly inclined charging hopper (5) with a height which exceeds the thickness of the pigs only insignificantly and a width such that the pigs can be held next to one another in the hopper with the majority of their length projecting freely above the pool of molten metal and in such a number that their weight is sufficient to at least compensate for the cast weight.
4. Low-pressure casting machine according to claim 3, characterized in that, the bottom or the top of the charging hopper is provided with walls or to be precise webs (6) which form guide channels (7) for the pigs.
5. Low-pressure casting machine according to claim 3 or 4, characterized in that, a preheating chamber (8) is formed on top of the casting machine.